How do I use the CHISQ.DIST.RT function in Excel?

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The CHISQ.DIST.RT function in Excel allows users to calculate the right-tailed probability of the chi-square distribution. This function can be useful in statistical analysis, as it helps determine the likelihood of an event occurring based on a set of data. To use the function, users must input the degrees of freedom and the value at which the probability is being evaluated. The result will be a decimal between 0 and 1, representing the probability of the event occurring. This function can be accessed through the "Formulas" tab in Excel and can aid in making informed decisions based on statistical data.

Returns the right-tailed probability of the chi-squared distribution.

The $\chi 2$ distribution is associated with a $\chi 2$ test. Use the $\chi 2$ test to compare observed and expected values. For example, a genetic experiment might hypothesize that the next generation of plants will exhibit a certain set of colors. By comparing the observed results with the expected ones, you can decide whether your original hypothesis is valid.

Syntax

CHISQ.DIST.RT(x,deg_freedom)

The CHISQ.DIST.RT function syntax has the following arguments:

X Required. The value at which you want to evaluate the distribution.

Deg_freedom Required. The number of degrees of freedom.

Remarks

If either argument is nonnumeric, CHISQ.DIST.RT function returns the #VALUE! error value.

If any argument is nonnumeric, CHISQ.DIST.RT function returns the #VALUE! error value.

If deg_freedom is not an integer, it is truncated.

If deg_freedom < 1 or deg_freedom > 10^10, CHISQ.DIST.RT returns the #NUM! error value.

Example

Copy the example data in the following table, and paste it in cell A1 of a new Excel worksheet. For formulas to show results, select them, press F2, and then press Enter. If you need to, you can adjust the column widths to see all the data.

Data	Description	
18.307	Value at which you want to evaluate the distribution	
10	Degrees of freedom	
Formula	**Description**	**Result**
=CHISQ.DIST.RT(A2,A3)	One-tailed probability of the chi-squared distribution, for the arguments specified in A2 and A3.	0.0500006